

Title (en)
Multi-mode wrench

Title (de)
Multimodaler Schlüssel

Title (fr)
Clé multimodale

Publication
EP 3056313 A1 20160817 (EN)

Application
EP 15154405 A 20150210

Priority
EP 15154405 A 20150210

Abstract (en)
A multi-mode one-way wrench includes a head, a toothed wheel, a leading pawl, at least one following pawl and a switch. The head includes cutouts in communication with a chamber. The toothed wheel rests in the chamber and includes teeth. The pawls are movably rest in the cutouts and adapted for alternate engagement with the toothed wheel. The following pawl includes a stem. The switch rests on the head and made with at least one arched groove for receiving and guiding the stem to move the following pawl between a first mode for engagement with the toothed wheel and a second mode kept from the toothed wheel. The cutouts are biased from one another by an angle of $360^\circ \times (M+1/L) \div N$, wherein L is an integer for representing the number of the cutouts, M is any proper integer, and N is an integer for representing the number of the teeth.

IPC 8 full level
B25B 13/46 (2006.01)

CPC (source: EP)
B25B 13/463 (2013.01)

Citation (applicant)

- EP 12195169 A 20121130
- US 201213691477 A 20121130
- JP 2013170474 A 20130820
- CN 201210507001 A 20121130

Citation (search report)

- [A] GB 2197609 A 19880525 - MANWARING ALAN, et al
- [A] US 2014311300 A1 20141023 - CHEN YI-FU [TW]
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- [A] US 2013319184 A1 20131205 - CHEN BO-SHEN [TW]
- [A] US 2011296960 A1 20111208 - CHEN JU CHEN [US]

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CN113172576A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3056313 A1 20160817; EP 3056313 B1 20170906; ES 2645285 T3 20171204; PL 3056313 T3 20180131

DOCDB simple family (application)
EP 15154405 A 20150210; ES 15154405 T 20150210; PL 15154405 T 20150210